EDITORIAL

Creating the future

DOI: http://dx.doi.org/10.3163/1536-5050.102.1.002

Recently, I came across photos of the Taubman Health Sciences Library (THL) from 2006 showing the circulation desk in the background and the reference desk across from it, with one of the THL librarians sitting at the desk, completing paperwork, and waiting for a question. That same view today would show our combined service desk staffed by a paraprofessional or a graduate student and clearly labeled ''Information'' rather than ''Circulation.'' What was once the reference desk is now space occupied by public workstations. You would not see librarians in the picture at all, because they are working all over campus, going to places where the library's clients are found.

Other photos show shelves of print journal volumes and books. As I write this, in August 2013, the shelving units in our building are being dismantled and taken away. The last print volume of the 99% of the collection that was sent to offsite storage was removed at the end of May. We now have fewer than 4,500 print volumes stored in the building.

Today, THL has no reference librarians but does have an increasing number of liaisons and informationists. Fewer staff are handling those vanishing print materials, and more staff are building mobile apps, managing social media, and creating just-in-time instructional videos and screencasts.

There are similar changes in other libraries. Between an analysis of the annual statistics of the Association of Academic Health Sciences Libraries (AAHSL) and an informal poll of members in March 2013, I found that twenty-five libraries had either removed a significant portion of their print collections or had plans to do so within one to two years. Many of the libraries at new medical schools have totally digital collections or only small amounts of print. This change in collection composition and use of space in academic health sciences libraries continues to be a topic much discussed in both formal presentations and informal conversations.

If you think that these changes are internal library issues, look at the ever-growing collection of articles, blog posts, and presentations explaining that libraries are all but obsolete. In December 2012, the *New York Times* ran one of its ''Room for Debate'' features with the title, ''Do We Still Need Libraries?'' It is not so scary when we librarians say those things: it is good practice to think ahead and be proactive about a changing environment. It is very scary when deans, faculty, students, and the general public say the same things. If we have lost the faith of our constituents, the people who use our services and pay our bills and our salaries, we are in trouble.

What do you do when you find out seemingly overnight that the roles you have been playing in your institution are no longer needed or valued? Adapt. Find new roles. Move away from activities that are not valued and embrace value-added activities that demonstrate return on investment. Move quickly and change direction on a moment's notice. Never begin a sentence with ''I didn't go to graduate school to…''

Health sciences librarians and staff at THL and elsewhere spend little time and want to spend even less of it on managing physical space. It is not a priority for our institutions or our clientele. Library visitors still seek neutral territory: the so-called ''third space'' away from home and office or lab to read, study, think, and reflect. But in space- and cash-strapped institutions, such use of space is a luxury. And luxuries have few champions when budget cuts come calling.

Fewer and fewer faculty and students now start their research in the library building, and even fewer start with the library catalog. In response, librarians could continue to proclaim to one and all that the library is valuable and that research has to start at the catalog. Health sciences librarians could put a lot of effort into publicizing and explaining library resources. Or they could accept that low use of resources is not primarily because faculty, students, and other library clients are not aware of what the library provides. Rather, it is because there are many alternatives at lower cost and with lower barriers to use. If libraries cannot compete by being as easy to use and as inexpensive to the institution as the alternatives, we are toast. It does us no good to argue that we provide higher-quality services and resources. If the cheaper, easier competition is good enough, better is irrelevant.

Clayton Christensen at Harvard writes about ''disruptive innovation'' [1]. This force of disruption took out the steel industry, the big three automakers, and mainframe computers. It can take out libraries, too. Christensen's theory is that products eventually offer more features than most customers can use. A less full-featured alternative at a lower price becomes very attractive to a portion of the market. Over time, the alternative increases its share of the customers and slowly squeezes the older, established business into a shrinking high-end niche.

We can see this happening in the information field. Many of our customers are perfectly happy with the search results that Google provides and the free full-text resources that they find on the Internet. We librarians critique the accuracy, currency, and bias of that information, but many customers with simple questions find those results accurate, current, and objective enough. We know that objective assessment of search strategies and search results shows that students and residents consistently overestimate their abilities and the quality of their results. But

if they find an answer to their question, then that is good enough, and they decide that their strategies and searches are also good enough.

Those for whom ''good enough'' is sufficient are not willing to incur the additional costs associated with a library and librarians. After all, the information they need is free on the Internet, and a clerk can pay the bills for the small hodgepodge of electronic resources that are not. Everyone can do his or her own information research and retrieval, so traditional library services, and the librarians who provide them, run the risk of becoming a luxury service for a few customers with high-end needs.

But now for the good news: the doom and gloom about the future of libraries gets a disproportionate amount of attention. It is only the end of the world if we let it be. If we are proactive, adaptive, and willing to take on new roles, we have a say in our future. We are librarians. We are good at what we do. They (loosely defined) cannot live without us. We just need to show them that that is the way it is.

The fundamental mission of librarians remains the same. We are adopting different roles, but we are doing the same work at its most basic level. So what is the fundamental mission of libraries and librarians? A short, somewhat flip answer is ''our mission is your mission'' or vice versa. The mission of the library is the same as its parent organization's mission. Health sciences librarians have to be partners in achieving the goals of their universities, hospitals, laboratories, or agencies. My vision of the future of the library is one in which the library supports this mission so well that the members of the parent institution cannot imagine doing their work successfully without librarians.

Education

Although much of the content remains the same, we are seeing changes in educational methods across subject disciplines. The flipped classroom, in which instruction happens online and discussion and problem solving takes place in the classroom, will likely require librarians to interact with colleagues and with curricula in different ways. It also seems probable that there will be more use of multimedia and online materials, fewer face-to-face lectures, more integrated course work, and fewer stand-alone training sessions. Health sciences libraries are already adapting their instruction activities in response to these changes. It is likely those changes will not only continue, but also will grow to be a larger and larger part of the library's educational portfolio.

We may even see work related to massive online open courses (MOOCs) in our future. These massive, multi- and non-institutional courses present particular challenges for librarians, as copyright can be a barrier to providing all students with the same access to information resources. Librarians can play an important role advocating for fair use and for creatively providing access to resources fairly and cost effectively within the boundaries of license terms.

Competency-based curricula present additional opportunities for librarians, who can collaborate with faculty in developing competencies in information management and partner to teach and evaluate them effectively. Evidence-based practice is growing in importance and who better than librarians to teach how to find, assess, and apply evidence?

Research

The National Institutes of Health (NIH) have made it clear that translational research, multi-institutional collaborations, interdisciplinary approaches, and community engagement will be important aspects of their sponsored programs going forward. The Clinical and Translational Science Awards are the most prominent but not the only example of this commitment. Librarians are natural translators, with a track record of collaboration across institutional and disciplinary boundaries. We have always worked at the intersections of knowledge, helping knowledge move from its inception in the lab through its application at the bedside and out into the community of practice and even into the community, broadly defined. Those skills will serve us well as we partner with faculty to translate research into improved health outcomes.

The role of health sciences librarians in data management also seems likely to grow. In February, the White House Office of Science and Technology Policy mandated that federally funded researchers do a better job of managing the data resulting from their research. Researchers must proactively store it securely, organize it for retrieval and use, and make it available for further research or to inform the taxpayers who funded the research. Regardless of who provides the hardware for storage, data need more than just a place on a disk to call home. Metadata and tools for organizing, locating, and retrieving stored data have long been the purview of librarians, and many librarians are finding their skills in this area in growing demand. It seems that librarians may also play a more prominent role in managing and mapping descriptors in newly created databases of research data.

Other aspects of research information management are closely related to knowledge management. Databases that identify scientific experts are moving back into the spotlight because of the increasing mandate for collaboration. It is not easy to identify and distinguish among John Smiths and map each of them to their own correctly identified research and publications. Initiatives such as the Open Researcher and Contributor ID (ORCID) have been created to address this challenge. ORCID is community-based and open-sourced, and librarians are part of the community with expertise to contribute. ORCID is one example of many potential opportunities for greater librarian involvement in research.

Informatics continues to be important, in all its many aspects: clinical informatics, bioinformatics, and consumer and population informatics. Consumer and population informatics are newer fields than the other two. Informatics intersects consumer health with personal genetic profiles, personalized medicine, and personal health records. This deluge of information has implications for patients, practitioners, and librarians. Currently, librarians are asked to help patients and consumers identify and access information on diseases, treatments, and related subjects. The requested information will expand dramatically when individuals will need to identify information resources particular to their individual genetic makeup.

Patient care

Clinical care is an information-intense discipline. Evidence-based discovery is important. As we move past reviews and guidelines into systemic approaches, the learning health system emerges, with many of the same roles for librarians as exist in the research arena. For example, the need to store and organize large amounts of data and to make relevant information easily retrievable to improve practice offers librarians another opportunity to apply metadata knowledge and skills.

The infobutton is built into many electronic medical records, and there are a variety of commercial publishers and products that want to be at the other end of that click. Librarians can help implement infobuttons by identifying and evaluating resources, assisting with training users, teaching critical thinking skills, and identifying alternative resources.

Consumers' and patients' needs for knowledge about their health care are increasing. At the same time, health illiteracy has become widely recognized as a problem that needs to be addressed. Teaching health information literacy, both directly to patients and consumers and indirectly to health care professionals, may become a more prominent role for librarians. Lifelong learning has traditionally been a concept that referred to professionals' need to stay current with changes in their professions. I would argue that lifelong learning is important to everyone in an environment of fast-changing information. The education role for librarians is front and center here: teaching consumers how to find and evaluate information for themselves and their families. In a related role, librarians may find themselves assisting health care providers in finding information for their patients. These patients may want more than standardized handouts. Librarians can help clinicians identify reliable and vetted consumer resources that clinical care providers can feel comfortable referring their patients to. Some public libraries already have programs addressing these needs and may welcome partnerships with medical librarians.

The predicted growth and development of personal genetic profiles and personalized medicine also will likely lead to opportunities for health sciences librarians. Imagine what information management skills and tools individuals may need to organize and interpret not only patient information materials, peer-reviewed articles, and material retrieved from databases of health care information, but also extensive information on their personal genetic profiles and how their genetics might affect their health and their health care. Think about the overwhelming amount of information this represents. And the information itself will be constantly changing as science advances—hence lifelong learning for lay audiences as well as professionals.

These are just a few examples of the changing environment and possible future roles for librarians. The future is not neat and orderly. And it is not waiting for us. We cannot find the future, because it does not exist. It will not exist until we create it. The question we need to wrestle with is not ''what does the future hold for health sciences libraries?'' but rather ''what future are health sciences librarians going to build for themselves?'' Every library, and every librarian, has a responsibility for our future, because what each of us does is part of that future. When you add up all the individual librarian futures, you have the future of librarians.

In the end, I can only say that I do not know what all the librarian's roles will be in the future, but I look forward to discovering the ones that exist and creating the ones that do not.

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Reference

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